A. IN THE SPECIFICATION

On page 14, after line 10, start a new line, and kindly amend the specification by inserting the following:

--BRIEF DESCRIPTION OF THE DRAWING

In order to enable the reader to attain a more complete appreciation of the invention, and of the novel features and the advantages thereof, attention is directed to the following detailed description when considered in connection with the accompanying drawing, wherein:

FIG. 1 illustrates the characteristic X-ray diffraction pattern of one embodiment of the present invention, where foshagite and xonotlite are present.

FIG. 2 is a scanning electron micrograph ("SEM") (at 10,000X magnification) of the product described by the X-ray diffraction pattern just set forth in FIG. 1, showing in detail the primary, fibrous particles which are joined together.

FIG. 3 is a scanning electron micrograph ("SEM") (at 2000X magnification) of the product described by the X-ray diffraction pattern just set forth in FIG. 1 and also just illustrated in FIG. 2, now showing how the primary, fibrous

particles are joined together, producing a secondary, three dimensional, "hay-stack" structure.

FIG. 4 illustrates the characteristic X-ray diffraction pattern of another embodiment of the present invention, where riversideite and xonotlite are present.

FIG. 5 is a scanning electron micrograph ("SEM") (at 10,000X magnification) of the product described by the X-ray diffraction pattern just set forth in FIG. 4, showing in detail the globular particles which are provided.

FIG. 6 is a scanning electron micrograph ("SEM") (at 2000X magnification) of the product described by the X-ray diffraction pattern just set forth in FIG. 4 and also just illustrated in FIG. 5, now showing details of several particles.

FIG. 7 illustrates the solubility of lime in water as a function of temperature.

FIG. 8 illustrates the solubility of various forms of silica in water as a function of temperature.

FIG. 9 illustrates one heating and cooling cycle which has been found to be advantageous for reaction conditions suitable for formation of the "TISIL™" brand product described in FIGS. 1, 2, and 3 above.

FIG. 10 is a comparison of sheet brightness as a function of percent filler, when using as filler either a commercial precipitated calcium carbonate (PCC) or the novel

calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 11 is a comparison of sheet opacity results as a function of percent filler when using as filler either a commercial precipitated calcium carbonate (PCC) or the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 12 is a comparison of sheet scattering coefficient results as a function of percent filler when using as filler either a commercial precipitated calcium carbonate (PCC) or the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 13 is a comparison of filler scattering coefficient results as a function of percent filler between commercial precipitated calcium carbonate (PCC) and the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 14 provides a comparison of paper sheet stiffness as a function of percent filler, between a commercial precipitated calcium carbonate (PCC) and the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 15 provides a comparison of paper sheet bulk as a function of percent filler, between a commercial precipitated calcium carbonate (PCC) and the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 16 provides a comparison of paper sheet porosity as a function of percent filler, between a commercial precipitated calcium carbonate (PCC) and the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 17 provides a comparison of paper sheet tensile index as a function of percent filler, between a commercial precipitated calcium carbonate (PCC) and the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 18 provides a comparison of paper sheet brightness as a function of percent filler, between (a) the combination of a commercial precipitated calcium carbonate (PCC) and titanium dioxide, and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 19 provides a comparison of paper sheet opacity as a function of percent filler, between (a) the combination of a commercial precipitated calcium carbonate (PCC) and titanium dioxide, and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 20 provides a comparison of paper sheet scattering coefficient as a function of percent filler, between (a) the combination of a commercial precipitated calcium carbonate (PCC) and titanium dioxide, and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 21 provides a comparison of filler scattering coefficient, between (a) the combination of a commercial

precipitated calcium carbonate (PCC) and titanium dioxide, and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 22 provides a comparison of paper sheet stiffness as a function of percent filler, between (a) the combination of a commercial precipitated calcium carbonate (PCC) and titanium dioxide, and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 23 provides a comparison of paper sheet bulk as a function of percent filler, between (a) the combination of a commercial precipitated calcium carbonate (PCC) and titanium dioxide, and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 24 provides a comparison of paper sheet porosity as a function of percent filler, between (a) the combination of a commercial precipitated calcium carbonate (PCC) and titanium dioxide, and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 25 provides a comparison of paper sheet tensile index as a function of percent filler, between (a) the combination of a commercial precipitated calcium carbonate (PCC) and titanium dioxide, and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 26 provides a comparison of paper sheet opacity as a function of ash level, between (a) a commercial calcium

silicate ("BULKITE™" brand) and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 27 provides a comparison of paper sheet scattering coefficient as a function of ash level, between (a) a commercial calcium silicate ("BULKITE™" brand) and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 28 provides a comparison of filler scattering coefficient as a function of ash level between (a) a commercial calcium silicate ("BULKITE™" brand) and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 29 a comparison of paper sheet brightness as a function of ash level, between (a) a commercial calcium silicate ("BULKITE™" brand) and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein

FIG. 30 provides a comparison of paper sheet porosity as a function of ash level, between (a) a commercial calcium silicate ("BULKITE™" brand) and (b) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 31 provides a comparison of the normalized paper sheet opacity (interpolated to six (6) percent ash), when using various fillers, namely (a) a commercial calcium silicate ("HUBERSIL®" brand), or (b) a commercial calcium carbonate ("HUBER® Carbonate" brand), or (c) the novel

calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 32 provides a comparison of the sheet ink penetration results on newsprint sheets containing various fillers, interpolated to six (6) percent ash, showing the ink penetration when the newsprint was manufactured using (a) a commercial calcium silicate ("HUBERSIL®" brand), (b) a commercial calcium carbonate ("HUBER® Carbonate" brand), or (c) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 33 provides a comparison of the paper sheet show through results on newsprint sheets containing various fillers, interpolated to six (6) percent ash, showing the sheet show through results when the newsprint was manufactured using (a) a commercial calcium silicate ("HUBERSIL®" brand), (b) a commercial calcium carbonate ("HUBER® Carbonate"), or (c) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 34 provides a comparison of the paper sheet print through results on newsprint sheets containing various fillers, interpolated to six (6) percent ash, showing the sheet print through results when the newsprint was manufactured using (a) a commercial calcium silicate ("HUBERSIL®" brand), (b) a commercial calcium carbonate

("HUBER® Carbonate" brand), or (c) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 35 provides a comparison of the Gurley sheet porosity results on newsprint sheets containing various fillers, interpolated to six (6) percent ash, showing the sheet porosity when the newsprint was manufactured using (a) a commercial calcium silicate ("HUBERSIL®" brand), (b) a commercial calcium carbonate ("HUBER® Carbonate" brand), or (c) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 36 provides a comparison of the sheet tensile index results on newsprint sheets containing various fillers, interpolated to six (6) percent ash, showing the sheet tensile index results when the newsprint was manufactured using (a) a commercial calcium silicate ("HUBERSIL®" brand), (b) a commercial calcium carbonate ("HUBER® Carbonate" brand), or (c) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 37 provides a comparison of the Gurley sheet stiffness results on newsprint sheets containing various fillers, interpolated to six (6) percent ash, showing the sheet stiffness when the newsprint was manufactured using (a) a commercial calcium silicate ("HUBERSIL®" brand), (b) a commercial calcium carbonate ("HUBER® Carbonate" brand), or

(c) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 38 provides a comparison of the sheet static coefficient of friction results on newsprint sheets containing various fillers, interpolated to six (6) percent ash, showing the sheet static coefficient of friction when the newsprint was manufactured using (a) a commercial calcium silicate ("HUBERSIL®" brand), (b) a commercial calcium carbonate ("HUBER® Carbonate" brand), or (c) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

FIG. 39 provides a comparison of the Sheffield sheet smoothness results on newsprint sheets containing various fillers, interpolated to six (6) percent ash, showing the sheet Sheffield sheet smoothness when the newsprint was manufactured using (a) a commercial calcium silicate ("HUBERSIL®" brand), (b) a commercial calcium carbonate ("HUBER® Carbonate" brand), or (c) the novel calcium silicate hydrate ("TISIL™" brand) product described herein.

The foregoing figures, being merely exemplary, contain various aspects, properties, and elements that may be present or omitted from actual product implementations depending upon the circumstances. An attempt has been made to provide the figures in a way that illustrates at least those aspects and properties that are significant for an

understanding of the various embodiments and aspects of the invention. However, variations in the illustrated aspects, elements, and properties, especially as applied for maximizing different variations of the functional properties illustrated, may be utilized in various embodiments in order to provide an advantageous calcium silicate hydrate filler for various uses in the manufacture of paper.--